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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/806,158	03/23/2004	Katsumi Sakamaki	119161	2168
25944	7590	05/07/2007		
OLIFF & BERRIDGE, PLC P.O. BOX 19928 ALEXANDRIA, VA 22320			EXAMINER MCCULLOUGH, MICHAEL C	
			ART UNIT 3653	PAPER NUMBER
			MAIL DATE 05/07/2007	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/806,158	<b>Applicant(s)</b> SAKAMAKI ET AL.	
	<b>Examiner</b> Michael C. McCullough	<b>Art Unit</b> 3653	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 09 February 2007.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 1 recites the limitation "the sheet feed tray" in line 9. There is insufficient antecedent basis for this limitation in the claim.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 1-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Araki et al. (US 2001/0020765) in view of Kakegawa et al. (US 6,565,079 B1) in further view of Watase (US 2005/0073088 A1). Araki et al. discloses an image output unit (see Figure 1), a sheet feed member (see Figure 2 element 4), a separating member (see Figure 2 element 5) that rotates in reverse by retard motor (see Figure 4 element 12) that has a maximum torque output that the motor can operate at when required, a sheet feed tray (see Figure 2 element 2b), a sheet detection unit (see Figure 4 element 14) and a double-feeding state determination unit (see Paragraph 0081), a separating force adjusting unit (see Paragraph 0079-0083), and an information collection unit (see Paragraph 0111). Araki et al. does not disclose a separating member that rotates in reverse when a double feed occurs and rotates forward when one sheet is fed, a

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direction detection unit, and a holding unit. However, Kakegawa et al. discloses a similar device that includes a direction detection unit (see Figure 4 element 254) and a holding unit (see Figure 4 element 230 and Figure 28 step 1208) for the purposes of detecting rotation of the separating member (see column 15 lines 53-65) and applying a braking force to the separating roller to prevent a double feed (see column 11 line 66 through column 12 line 34). It would have been obvious for a person of ordinary skill in the art at the time of the applicant's invention to modify Araki et al. by utilizing a direction detection unit, as disclosed by Kakegawa et al., for the purpose of detecting rotation of the separating member. Araki et al. in view of Kakegawa et al. discloses all of the limitations except the separating member rotates in reverse when a double feed occurs and rotates forward when one sheet is fed.

However, Watase discloses a similar device that includes a separating member that rotates in reverse when a double feed occurs and rotates forward when one sheet is fed (see Figure 2 element 4) for the purpose of moving a sheet towards an operation and returning double fed sheets (see Paragraph 0037). It would have been obvious for a person of ordinary skill in the art at the time of the applicant's invention to modify Araki et al. in view of Kakegawa et al. by utilizing a separating member that rotates in reverse when a double feed occurs and rotates forward when one sheet is fed, as disclosed by Watase, for the purpose of moving a sheet towards an operation and returning double fed sheets.

### ***Response to Arguments***

Applicant's arguments with respect to claims 1-16 have been considered but are moot in view of the new ground(s) of rejection.


**Conclusion**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael C. McCullough whose telephone number is (571) 272-7805. The examiner can normally be reached on Monday-Friday, 7:00 am - 3:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Mackey can be reached on (571) 272-6916. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

MCM



PATRICK MACKEY  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 3600